## Prevalence of Diarrhea in the Community in Australia, Canada, Ireland and the United States

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**Background** A number of international studies have estimated the prevalence of diarrhea in the community. However, the use of different study designs and case definitions has made comparisons between countries difficult.

**Methods** Similar cross-sectional telephone surveys were conducted in Australia, Canada, Ireland, and the United States. All surveys were conducted over a 12-month period between 2000 and 2002. Data were collected on demographics and gastrointestinal symptoms in the four weeks prior to interview. For this comparative analysis diarrhea was defined as three or more loose stools or bowel movements in any 24-hour period.

**Results** Questionnaires were completed on 6,087 persons in Australia, 3,496 in Canada, 9,903 in Ireland and 14,647 in the United States. In the four weeks prior to interview, at least one episode of diarrhea was reported by 6.1% of respondents in Australia, 6.6% in Canada, 3.4% in Ireland and 7.2% in the United States. The prevalence of diarrhea was consistently higher in females. In all countries the prevalence of diarrhea was highest in children <5 years of age and lowest in person =65 years of age. When diarrhea and vomiting was considered the prevalence in the four countries was almost identical, between 1.9% and 2.3%. Despite differences in the structure of health care, a similar proportion of ill respondents (approximately one in five) in each country sought medical care for diarrhea. The use of antibiotics was reported by 3.8% of respondents with diarrhea in Australia, 3.4% in Canada, 5.6% in Ireland, and 7.8% in the United States.

**Conclusions** With similar methodologies and a standard case definition for diarrhea, age and sex patterns and health care seeking behavior were remarkably consistent between countries. Diarrhea is a common illness among persons in the community in all four countries.